REMARKS

I. STATUS OF THE CLAIMS AND SUMMARY OF THE OFFICE ACTION

A. Status of the Claims

Claims 1, 3, 4, 6-23, and 27-72 are pending. Claims 53-72 have been withdrawn from consideration by the Office pursuant to a Requirement for Restriction. Thus, claims 1, 3, 4, 6-23, and 27-52 are pending and under consideration on the merits.

Claim 1 has been amended to remove the second recitation of "polyolefin" from the list of particulate materials. As this amendment merely corrects a formal error (i.e., the double recitation of "polyolefin" in previous claim 1), Applicant submits that it does not introduce any issue of new matter.

B. Summary of the Non-Final Office Action

In the Non-Final Office Action dated March 17, 2009, the Office:

- withdrew all of the prior claim rejections under 35 U.S.C. § 103(a) (Office Action, page 2); and
- rejects claims 1, 3, 4, 6-23, 27-52 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 3,583,882 to Bartrug et al. ("Bartrug") in view of U.S. Patent 4,440,881 to Girgis ("Girgis") (*Id.* at 2-7)[1];

Applicant thanks the Office for withdrawing the prior applied 35 U.S.C. § 103(a) rejections. As to the new ground of rejection, Applicant respectfully disagrees with and traverses the Office's position for the following reasons.

[1] Claims 29, 31, and 32 are not included in the statement of rejection on page 2 of the Office Action. However, these claims are rejected on pages 5 and 6 of the Office Action.

II. RESPONSE TO 35 U.S.C. § 103(a) REJECTION

According to the Office, Bartrug discloses a glass fiber material that is sized and coated with a aqueous terpolymer latex material, and which meets each and every element of claim 1 except for the claimed particle size. *See* Office Action, pages 2-3. To correct this deficiency, the Office relies on Girgis for the disclosure of glass fibers that are coated with a similar terpolymer latex as Bartug's fibers, and which has a particle size that "must be less than 2000 angstoms . . . ." *Id.* at 3. From this, the Office concludes that "[i]t would have been obvious to one of ordinary skill in the art to use as the . . . terpolymer of Bartrug, a commercially available polymer such as that taught by Girgis having a low average particle size, with the reasonable expectation of success of forming glass strands having improved flexibility and improved fatigue resistance." *Id.* at 4.

Applicant respectfully disagrees, and traverses this rejection because Bartrug and Girgis fail to teach or suggest each and every element of the pending claims, whether considered alone or in combination. In particular, Bartrug and Girgis both fail to teach or suggest a glass fiber product comprising at least one glass fiber having particles of the claimed size and composition adhered thereto.[2] *See* claim 1.

Bartrug discloses a process for coating and impregnating sized glass fibers, wherein sized glass fiber strands are suspended in an aqueous elastomeric coating

[2] For the purposes of this response, Applicant has limited the rebuttal of the Office's position to the failure of the cited references to teach or suggest the claimed particles. In limiting the rebuttal in this way, Applicant is not representing an agreement with any other position taken by the Office. Unless expressly stated herein, Applicant disagrees with and traverses each and every position taken by the Office.

composition, resulting in the coating and impregnation of the fibers with the coating composition. *See* Bartrug at column 3, line 65-column 4, line 5. In a specific embodiment, Bartrug coats sized glass fibers with an "adhesive" coating composition that includes, *inter alia*, a *mixture of* resorcinol, formaldehyde (CH_2O), and a butadiene-styrene vinyl pyridine terpolymer. *See id*. at column 5, lines 8-15 and 35-55 and 55-65 (emphasis added). Upon drying with a dielectric heater, the resulting coating was "sufficiently dry and free of tack, for further processing . . . without stripping off coating material and/or depositing coating materials on the rolls." *Id*. at column 6, lines 15-20. The coated strands were then heated for a second time in a hot gas oven to effect curing of the resorcinol formaldehyde. *See id*. at column 6, lines 29-34.

However, Bartrug fails to teach or suggest a glass fiber product that: (a) has particles of the claimed size and composition adhered to glass fibers for the purpose of reducing tackiness. *See id*.[3] Indeed, Bartrug appears to be silent with respect to adhering particulate materials to glass fibers, or the incorporation of such materials into its disclosed coating compositions.

Moreover, Bartrug appears to *teach away* from the use of particulate materials in its coating composition when it expressly compares its disclosed coating compositions to prior art processes that "[find] it necessary to resort to the expedient of applying various powdered coatings, such as zinc stearate, corn starch, talc, polyethylene, silica, carbon black and the like, to alleviate . . . tackiness . . . prior to subsequent handling and processing. . . ." *Id*. at column 7, lines 60-72. Indeed, Bartrug characterizes the

[3] The Office admits this fact at page 3 of the Office Action.

use of additional powder coating steps as, "undesirable," and as being unnecessary when the disclosed coating composition is employed. *Id.*; *See also* column 6, lines 45-51.

Applicant acknowledges the Office's position that Bartrug's terpolymer "latex dispersed in water necessarily embraces particles." In taking this position, the Office appears to assert that Bartrug's process will result in the formation of latex particles on the disclosed glass fibers. In fact, the Office appears to not only assume that terpolymer latex particles will form upon deposition, but that those deposited particles will be of the same diameter as the particles in solution. *See* Office Action, page 4.

Applicant respectfully disagrees with this position because the Office's position wrongfully assumes that because a terpolymer latex (i.e., dispersion) has a particulate/droplet size *as dispersed*, it will necessarily form particulates *once deposited* on a substrate. The Office has not explained *why* particles will necessarily form, and the cited references appear to provide no information supporting the Office's conclusion that particles *will* form. While Bartrug discloses that after deposition of the coating composition, a dielectric heating process is used which leaves the solid materials of the coating composition "substantially unaffected," in all instances Bartrug *further* heats the coated glass strands (i.e., after dielectric heating) to effect *curing and/or reaction* of the components of the coating composition. *See* Bartrug, column 6, lines 1-35 (emphasis added). Bartrug appears to be silent, however, with respect to the conformation of the solid materials of the coating composition after this additional heating process, and does not appear to disclose that the solid components of its composition, and in

particular the disclosed terpolymer latex, are in particulate form after the disclosed secondary heat treatment.

Girgis does not cure the deficiencies of Bartrug discussed above. Like Bartrug, Girgis discloses the application of an aqueous coating composition that comprises a terpolymer latex and resorcinol formaldehyde to glass fibers. *See* Girgis, column 3, lines 29-48 and column 9, line 59-column 10, line 15. In particular, Girgiss discloses the use of a terpolymer latex (i.e. dispersion) having a particle size less than 2000 Angstroms, such as from about 500 to 1700 Angstoms. *See id*. at column 8, lines 35-45. However, Girgiss' disclosed particle size ranges appear to relate to the size of the latex particles *as dispersed*. Like Bartrug, Girgiss does not appear to teach or suggest that the latex components of the disclosed coating composition remain in particulate form once the coating composition is deposited on glass fibers.

Moreover, Girgis does not appear to provide any information establishing that its disclosed latex materials will remain in particulate form after being deposited and exposed to Bartrug's heat treatment processes. Thus, Applicant respectfully submits that the burden remains on the Office to explain why and how: a) the proposed combination necessarily results in the claimed invention; or b) one of ordinary skill would see any reason to modify the cited references to arrive at the claimed invention. Such an explanation is particularly necessary, given that Bartrug and Girgiss focus on the provision of a *coating* (i.e., a layer) on the surface of glass fibers, not on the despoition of particles.

For the foregoing reasons, Applicant submits that Bartrug and Girgiss do not teach or suggest each and every element of the pending claims because they do not disclose a glass fiber product comprising glass fibers having particles of the claimed size and composition adhered thereto. Moreover, the Office has not explained why or how one of ordinary skill would modify the cited references in an attempt to arrive at the claimed invention. Thus, Applicant respectfully submits that the 35 U.S.C. § 103(a) rejection of claims 1, 3, 4, 6-23, and 27-52 is improper, and should be withdrawn.

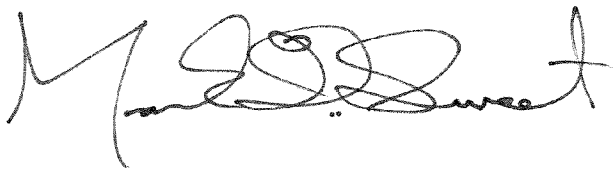
III. CONCLUSION

In view of the foregoing amendments and remarks, Applicant respectfully requests reconsideration of this application and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our Deposit Account No. 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,
GARRETT & DUNNER, L.L.P.



Dated: June 17, 2009

By:_____
Mark D. Sweet
Reg. No. 41,469
202.408.4162